INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI
भारतीय प्रौद्योगिकी संस्थान तिरुपति
Yerpedu-Venkatagiri Road, Yerpedu Post, Tirupati District, Andhra Pradesh - 517 619

1.	Title of the course	Water and Wastewater Engineering
2.	Course number	CE216L
3.	Structure of credits (L-T-P-C)	2-1-0-3
4.	New course/modification to	Modified with CE303L/ENVIRONMENTAL ENGINEERING
5.	To be offered by	Civil and Environmental Engineering
6.	Proposed by	Shihabudheen Mundampra Maliyekkal
7.	Prerequisite	None
8.	**Course Objective(s):** To introduce the principles and concepts of physical, chemical and biological processes involved in water and wastewater treatment. To explain the importance of water and wastewater treatment and develop skills in the basic design of unit operations and unit processes in water and wastewater treatment.	
9.	**Course Content:** Introduction to water and wastewater treatment systems; Water quality parameters; Drinking water standards; Physicochemical treatment of water; Preliminary and primary treatment of municipal wastewater; Secondary sewage treatment processes; Introduction to anaerobic treatment; Introduction to advanced water and wastewater treatment technologies.	
10.	**Textbook(s):** 1. Peavy H S, Rowe D R and Tchobanoglous G E, Environmental Engineering, 3rd Edition, McGraw Hill, New York (1985). 2. Masters G M, Introduction to Environmental Engineering and Science, Prentice Hall India, New Delhi (2008).	
11.	**Reference(s):** 1. Sincero A P and Sincero G A, Environmental Engineering: A Design Approach, Prentice Hall India, New Delhi (1999). 2. Metcalf and Eddy Inc., Tchobanoglous G, Burton F and Stensel H D, Wastewater Engineering – Treatment and Reuse, 4th Edition, Tata-McGraw Hill, New Delhi (2009).	